

Docket No.: 19338CD-CPA2

Serial No.: 08/554,424

REMARKS

Claims 24-29 are pending in this application after entering of the amendments herein.

A separate version of the amendments above, with changes shown from the last version, is provided on separate sheet(s) attached hereto, entitled "Version with markings to show changes made." The above amendments are made with the understanding, based on a telephone conversation with the Examiner of February 4, 2003, that the amendments made after Final, sent by facsimile on November 12, 2002, were not entered.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Joseph Fischer, Applicants' Attorney at 888-416-1464 (toll free) so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

I hereby certify that this correspondence is being forwarded via Facsimile No. 703-873-9306, to ATTN: Examiner Patrick Nolan, Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit: March 7, 2002

Typed Name: Joseph Fischer

Signature: 

By 

Joseph Fischer  
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**Version with markings to show changes made**

**In the Claims:**

Claim 24 has been amended as follows:

24. (Amended) [The method of claim 21] A method of identifying a ligand that modulates a *Drosophila* membrane voltage-activated sodium channel, which comprises:

- (a) expressing an isolated *Drosophila* voltage-activated sodium channel *para*, and expressing an isolated *Drosophila* voltage-activated putative beta subunit, *tipE*, in a first *Xenopus* oocyte host cell, wherein said expressing of *para* and said expressing of *tipE* occur after coinjection of *para* and *tipE* RNA, wherein said *para* RNA is encoded by the DNA molecule as set forth in SEQ ID NO: 7, and wherein the host cell resultingly expresses a voltage-activated sodium current that is tetrodotoxin sensitive;
- (b) contacting the first host cell with said ligand;
- (c) measuring the resulting voltage-activated current; and
- (d) comparing the voltage-activated current measured according to step (c) with voltage-activated current measured in a second, control *Xenopus* oocyte host cell prepared according to step (a) and not treated with said ligand.

Claim 25 has been amended as follows:

25. (Amended) [The method of claim 22] A method of identifying a ligand that modulates a *Drosophila* membrane voltage-activated sodium channel, which comprises:

- (a) co-expressing an isolated *Drosophila* voltage-activated sodium channel *para* and an isolated *Drosophila* voltage-activated putative beta subunit, *tipE*, in a host cell from a multicellular organism, wherein said co-expressing of *para* and *tipE* occurs after an isolated DNA molecule encoding *para* and an isolated DNA molecule encoding *tipE* are introduced into said host cell, wherein said isolated DNA molecule which [expresses]encodes *para* is as set forth in SEQ ID NO: 7, and

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wherein the host cell resultingly expresses a voltage-activated sodium current that is tetrodotoxin sensitive;

- (b) contacting the first host cell with said ligand;
- (c) measuring the resulting voltage-activated current; and
- (d) comparing the voltage-activated current measured according to step (c) with voltage-activated current measured in a second, control *Xenopus* oocyte host cell prepared according to step (a) and not treated with said ligand.

Claim 26 has been amended as follows:

26. (Amended) [The method of claim 23] A method of identifying a ligand that modulates a *Drosophila* membrane voltage-activated sodium channel, which comprises:

- (a) expressing an isolated *Drosophila* voltage-activated sodium channel *para*, and expressing an isolated *Drosophila* voltage activated putative beta subunit *tipE*, in a host cell selected from the group consisting of *Xenopus* oocytes and a cell from a multicellular organism, wherein an isolated DNA molecule which expresses *para* comprises a DNA sequence as set forth in SEQ ID NO: 7, and wherein the host cell resultingly expresses a voltage-activated sodium current that is tetrodotoxin sensitive;
- (b) contacting the first host cell with said ligand;
- (c) measuring the resulting voltage-activated current;
- (d) comparing the voltage-activated current measured according to step (c) with voltage-activated current measured in a second, control *Xenopus* oocyte host cell prepared according to step (a) and not treated with said ligand; and
- (e) comparing the voltage-activated current measured according to step (c) with voltage-activated current produced prior to contacting the host cell with the ligand.